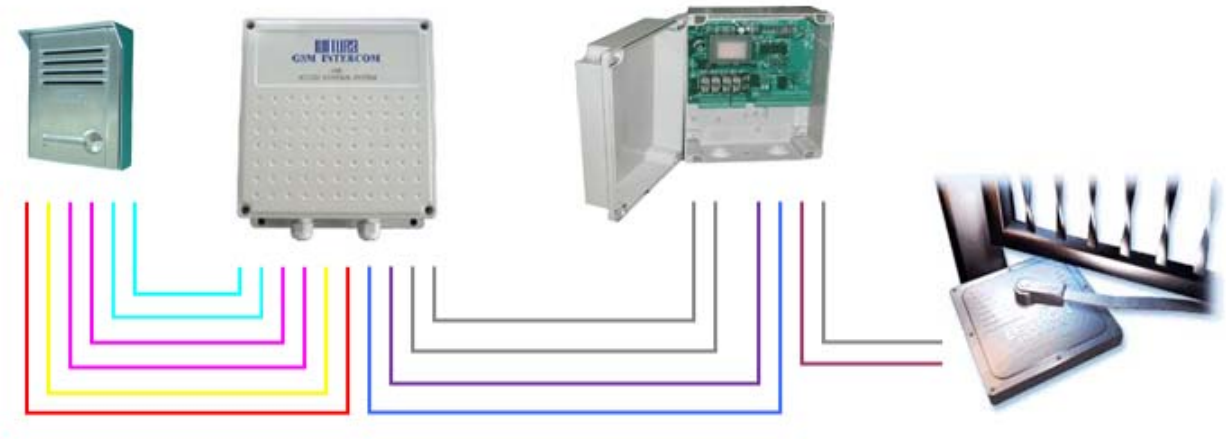
GSM Intercom Remote Control and Alarm System



Introduction

The New GSM Intercom WT-9002 has been designed as a system to communicate via a fixed call Point to either a land line or Mobile using the GSM Network without the requirement of any cabling from the gate entry to the point of contact and also eliminating the problems that occur with long range wireless systems as this system has no range barriers as long as an acceptable GSM-Network is available at the site location.

This system also allows the person called to operate two separate relays using the key pads on either the Land Line or Mobile Phone regardless of the location or distance apart and these may represent a gate and a door or entrance lights etc

Other features include a Battery Backup to alert you when the mains power fails at the gate and the system can also sound an audible alarm in the event the power fails to further alert the property owner.

The system comes with a complete GSM Interface in an IP 65 Enclosure and a Stainless Steel external Call-Point requiring only a 6 wires connection between the Interface and the Call Point.

The system also has the facility to store up to 1000 authorized users who can access the system via Mobile phone or Landline and these numbers can be programmed via text messaging or using the software package provided with the system.

It is also possible to change or override the parameters of both the output relays remotely via SMS and receive confirmations of these commands and add and remove authorized users without having to be present on site or again use the software package provided with the system.

The Interface is housed in a back flanged IP65 Rated Enclosure and can be located and fixed without having to open the cover or requiring any internal fixings within the enclosure making it a secure and waterproof Installation giving maximum protection for the control equipment inside.

The Call Point is a two piece fixing with the shield located and fixed and the main Intercom fascia locked into place and secured via the security fixing on the under frame of the casing and again providing a very secure vandal resistant and waterproof housing.

It is advised the distance from the Interface to the Call Point des not exceed 3 meters and it is also advised to install at least an 8 core in the event you may want to use a backlight version of the call point or change at a later stage to a Keypad or Camera version available later this year.

Installation and wiring

Once you have located and installed both the Interface and the Call point you will have the 8 cores coming from the Call Point and will require a power source to the unit and the connecting cables from the Interface to the gate control board to connect into the gate input pulse connections to activate the gates via the Intercom Interface and again it is advised to run another 8 core connecting cables in the event you may want to use the secondary relay or the manual input triggers for the two output relays at a later stage.

Power Supply

The Power supply required needs to be a 12 Volt DC capable of providing 1 amp currant to enable the battery back-up to remain consistently charged, the system will operate with a 12 Volt supply but may restrict the charging capability of the battery back up system and therefore the system may not be able to send power down alerts in the event of a mains power failure.

SIM Card

The system will accept any Universal Network SIM Card and it is essential that you remove any Pin Code requests from the SIM Card which can be done by placing the SIM Card in an unlocked Mobile Phone and using the features on most Mobile Phones to disable the Pin Code request as if the Pin Request is enabled the system will not log on to the network and the unit will refuse to be programmed and will not function.

In addition it is essential you also disable the Voice Mail function which can be in same case done again by placing the SIM Card in an unlocked Mobile Phone and contacting your service provider to remove this function and insure the SIM Card does not accept or store any incoming voice messages, which can sometimes cause the system to freeze up and stop functioning.

Mobile Phone Credit

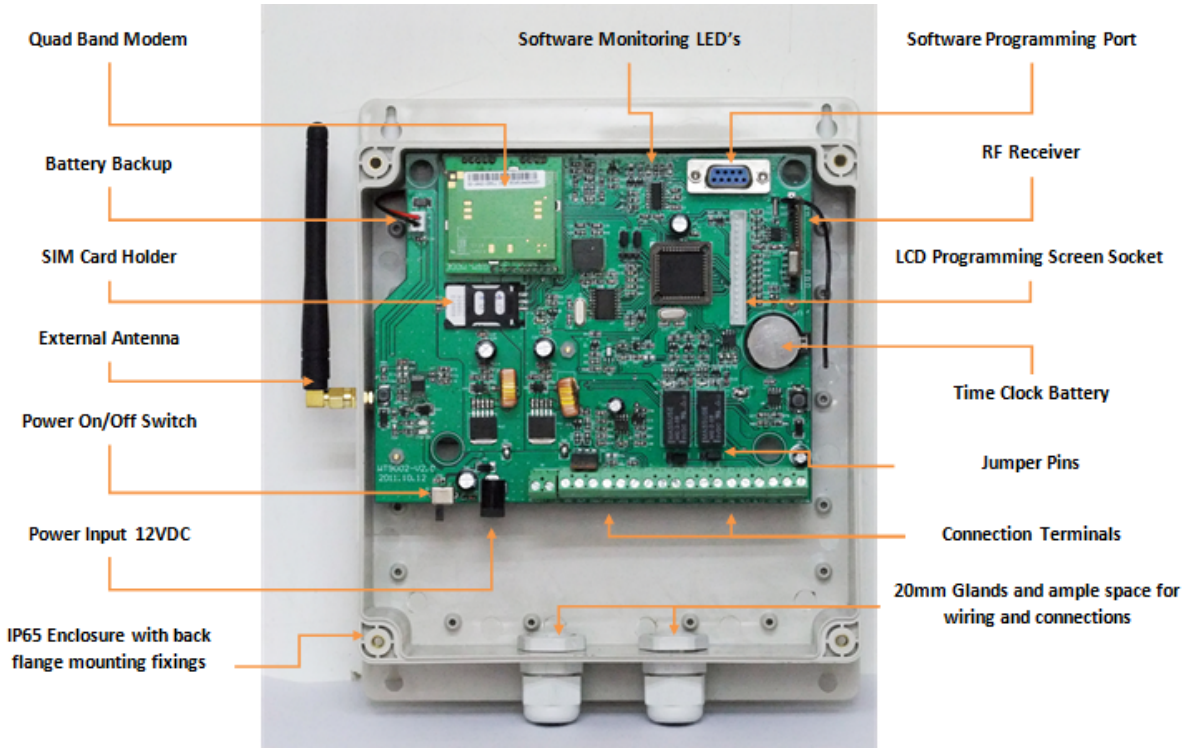
It is also essential that the SIM Card is retained with enough credit at all times so as to be able to make outgoing calls at all times otherwise the system will not operate in the Intercom mode and obviously make the required outgoing calls even though the access control system will continue to operate by calling the unit as there is no connection charge for using this function a the system will continue to accept and implement the commands requested, but will not return the confirmation SMS Messages until the SIM Card is returned to a credit status

Booting up the System

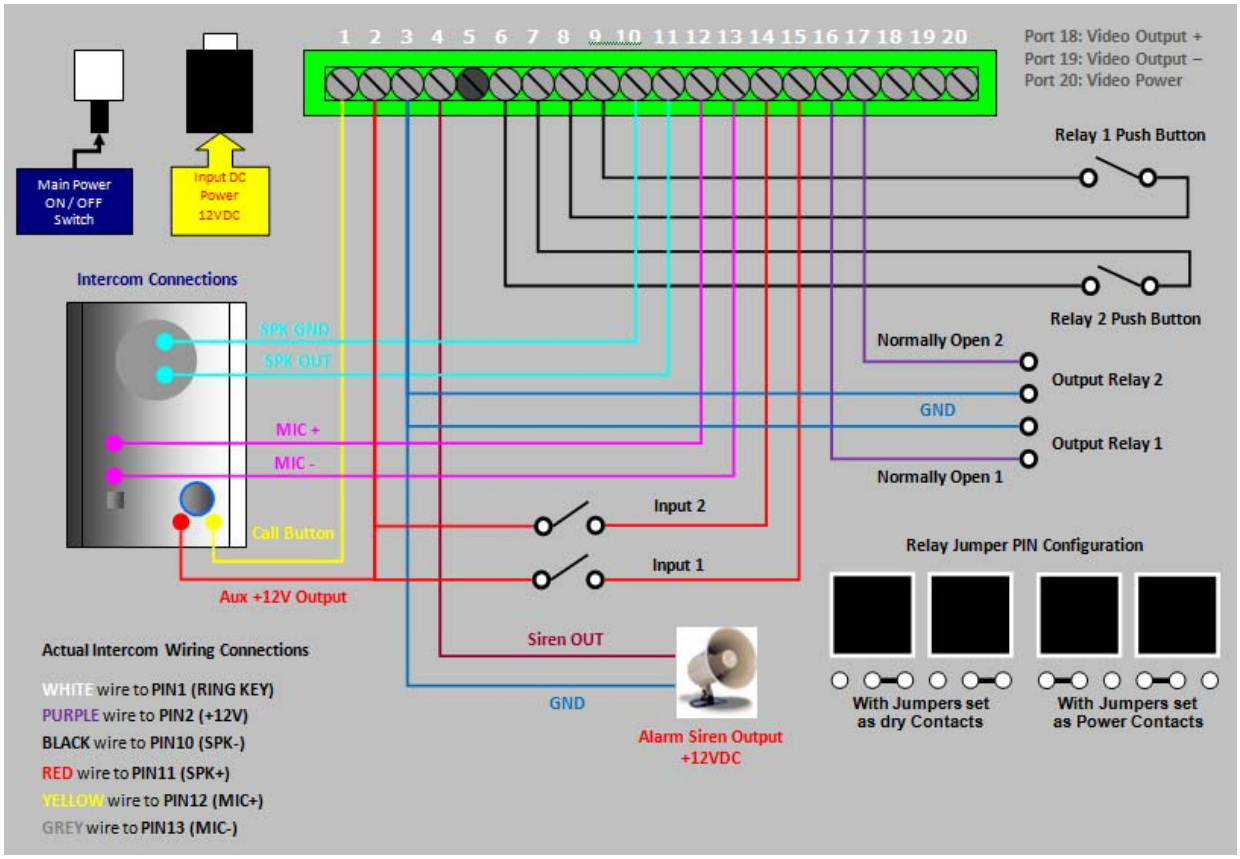
Once you have inserted the SIM Card in the Holder on the control Board and wired up the system as per the enclosed diagram, you can now Boot up the system by turning on the unit by using the Low Voltage Switch on the control board.

The board has two LED Indicator Lights Green as Network and Red as Power on Indicator and both will initially come on together and the Green LED indicator will oscillate infrequently until it locates the network and flashes every 4 seconds constantly and the system has successfully logged on to the network and ready to be programmed for use.

Hardware Description:



Wiring Diagram:


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Port 18: Video Output +
Port 19: Video Output –
Port 20: Video Power
Main Power ON / OFF Switch
Input DC Power 12VDC
Relay 1 Push Button
Relay 2 Push Button
Intercom Connections
SPK GND
SPK OUT
MIC +
MIC -
Call Button
Aux +12V Output
Normally Open 2
Output Relay 2
GND
Output Relay 1
Normally Open 1
Input 2
Input 1
Relay Jumper PIN Configuration
Siren OUT
GND
Alarm Siren Output +12VDC
With Jumpers set as dry Contacts
With Jumpers set as Power Contacts
Actual Intercom Wiring Connections
WHITE wire to PIN1 (RING KEY)
PURPLE wire to PIN2 (+12V)
BLACK wire to PIN10 (SPK-)
RED wire to PIN11 (SPK+)
YELLOW wire to PIN12 (MIC+)
GREY wire to PIN13 (MIC-)

Installing the SIM Card and Booting up the system

To Install the SIM Card you will need to lift up the card carrier and slot in the SIM Card and locate it in place making sure it is fitting the correct way around with the slot edge matching and face down.

The system would have been supplied with the Battery Back battery connection disconnected for safety reasons and you will now need to plug this back in and can also plug in the 12 Volt Power supply and switch the system on using the On/Off Switch.

The visual LCD screen will now show you a network < **Search... Wait** > message and an < **OK** > momentary indication that is has located the required network and the screen will indicate a visual signal strength, the battery status and if power is applied to the system along with the model number of the system being the < **WT-9002** >.

The Green Network indicator Led located on the LCD board should then also be oscillating every approximately every 4 seconds continually to confirm the system has registered successfully with the network.

Registering the Administration Numbers to program the system

The system will allow up to 3 administrators to program the unit and these numbers are also the telephone numbers that the system will call in the order they were programmed in and these are also the telephone numbers that receive the SMS Text alerts again in the order they were programmed in and default sets the first telephone number programmed only to receive the text alerts and the other two are set using the ***RERN#** as explained later

The system is factory preset as default to allow anybody to be able to program the first Administration number into the system and after this has been done this is the only initial number that can add the additional administration numbers and parameters of the system.

Once the second and third administration has been added the original administrator can then be deleted by one of the other two administrators and this would apply when an engineer would be setting up a customers site and testing and commissioning the system using his own number, which would be replaced with the customers number once fully commissioned to the satisfaction of the engineer.

To program the first administer number you would send the following SMS Message to the Unit assuming the number is **0124806804**

Message sent *TEL1#0124806804

The visual screen will light up when this message has been received and if is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and the system will return a confirmation SMS Message as

Message Received TEL1=0124806804

This is now the first number the system will call when the Intercom call point is activated via the bell push and the first number that will receive any SMS text alerts and it is possible to toggle these SMS Messaging alerts **OFF** and **ON** using the ***RERN#** as referred to later.

To program the remaining two administration numbers you would use the same format as with the first administrator i.e. ***TEL2#** and ***TEL3#**

In some situations you may wish to have the system call your home number twice in the event the first call is not reached in time because of the locations of the Land Line Telephones and thus it is possible to enter the

same number in both admin 1 and admin 2 slot or even admin 3 can all be the same number of which the system will call.
The system in this event will call number one and if it is not answered within the time scale set the system will call the second number and then the third number before abandoning the attempt and logging off.

To check the administrator numbers in the list you would send the following command to unit.

Message Sent *ADM?#

The visual screen will light up when this message has been received and if is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and the system will return a confirmation SMS Message as

Message received

TEL1
0124806804
TEL2
11111111111
TEL3
11111111111
END

Setting up the Caller ID System to activate security settings

The system will allow the 3 administrators automatic access to the system (Gates) via their Mobile Phone by just calling the system which activates the output relay one as per the factory default of one second and to set this function to the active mode you would sent the following SMS Messages to the system.

Message Sent *TEL?#1

The visual screen will light up when this message has been received and if is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and the system will return a confirmation SMS Message as

Message received TEL-ON

Now if you call the system the Visual Display will show your telephone number and confirm you are an **ADMIN** status and activate the relay one as per the default setting of one second.

Now the 3 Administrators can access the system direct via Mobile Phone as well as control the system when called via the Intercom system.

Setting up the Guest list to be able to access the system

It is possible to allow up to 1000 user numbers to be stored that have access to the system via their Mobile Phone or Land Line and these numbers can be entered or deleted remotely via SMS Messaging or using the Soft Ware package provided.

For domestic applications where only a few numbers are to be added it is possibly easier and more convenient to store them via SMS Messaging.

To enable the function mode to be able to store the Guest List Numbers you would send the following SMS Message to the system.

Message sent *ANY?#1

The visual screen will light up when this message has been received and if is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and the system will return a confirmation SMS Message as

Message received ANY-ON

The system is now ready to accept numbers programmed in as guests who can be entered with no restriction to the amount of digits in the number and the simple format of programming automatically stores the number in the correct listing a programming slot

You can enter any number by just adding the number to the following SMS command assuming the number is **0124806804**

Message sent *BOOK#0124806804

The visual screen will light up when this message has been received and if is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and the system will return a confirmation SMS Message as

Message received BOOK<<4 this number is now store in list 4 and now access the system via their Mobile Phone by calling the system phone number and the visual display will show the number as a guest when calling into the system and activate relay one for one second.

Deleting any of the numbers in the Guest List.

To delete any numbers in the Guest list you would simply send the following SMS Command followed by the telephone number assuming the number is **0124806804**

Sent Message *DEL>#0124806804

The visual screen will light up when this message has been received and if is in the correct format you will see the number **0124806804** displayed a confirmation **"END"** and the system will return a confirmation SMS Message as

Message received Delete-OK and the number **0124806804** has now been deleted from the Guest List and cannot access the system any more.

Delete all phone numbers in the Guest List.

To delete all phone numbers in the Guest list you would simply send the following SMS Command

Sent Message *DELB#

Message received Delete-Book and all the phone numbers have been deleted from the Guest List.

Setting up the Intercom parameters

The system allows you to adjust certain parameters such as ring time, speaker and Microphone settings etc. of which may be required to customize certain installations due to site conditions.

Adjusting Call time

To adjust the period of time of the outgoing call from the Call Point it is possible to set the ringing call time from a period of 20 seconds up to a maximum of 99 seconds before the system moves on to calling the next telephone number

To set the call time to 25 seconds you would send the following SMS Message to the system

Messages sent *TETI#25

The visual screen will light up when this message has been received and if is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and the system will return a confirmation SMS Message as

Message received TETI=<25> and the outgoing call will last 25 seconds before moving on to the next call and if all three numbers do not respond the system will hang up and disconnect from the network.

Factory default is set at 20 seconds

Adjusting the Talk time

It is possible to set the talk time period of a connected call the system will hold for 1 minute up to a maximum of 30 minutes before the system disconnect the call automatically.

To limit the talk time to only 5 minutes before the system disconnect the call you would send the following SMS Message to the system

Messages sent *RITI#5

The visual screen will light up when this message has been received and if is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and the system will return a confirmation SMS Message as

Message received RITI=<5> and the connected call will last 5 minutes before it disconnected from the network.

Adjusting Speaker Volume

It is possible to adjust the Output Speaker Volume via SMS Message from a 0 setting up to 6 (Default value: 5) and to set the speaker volume to level 5 you would send the following SMS Message to the system.

Messages sent *SOUD#6

The visual screen will light up when this message has been received and if is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and the system will return a confirmation SMS Message as

Message received SOUND<6> and the speaker level has been set to level 6

Adjusting Speaker Volume

It is possible to adjust the Microphone Volume via SMS Message from a 0 setting up to 9 (Default value: 2) and to set the Microphone volume setting to level 4 you would send the following SMS Message to the system.

Message sent *MICO#4

The visual screen will light up when this message has been received and if is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and the system will return a confirmation SMS Message as

Message received MICO:4 and the Microphone setting is now at level 4

Output Relay Operations

The system has two output relays both factory set as default to latch for one second when operated via the Intercom mode when being activated via the handset of the person called.

On receiving a call the person called can control both relay one and two using the following keys on their handset whilst the call is active.

Press * will activate relay one whilst the call is active!

Press # will activate relay two whilst the call is active!

Once the person called has been advised the Gates or door has been activated and allowed access they can just hang up the call to disconnect the call.

Just hang up the call will terminate the call and disconnect the system from the network.

Changing the Default Relay settings

It is possible to change the Default Relay settings for both relay one and relay two to suit the customers application and this change of settings is the same settings for when the system is called via caller ID to activate relay one and the setting when the customer activates relay two via their handset whilst an incoming call is active using the Intercom.

To change the default setting of relay one to 10 seconds from one second you would send the following SMS Message to the system

Message sent *EXT1#00010 and the command can be used up to a maximum of 65535 seconds with 5 digits from **00001** to **65535**

The visual screen will light up when this message has been received and if is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and the system will return a confirmation SMS Message as

Message received EXT1=00010 and relay one will latch for 10 seconds when called via caller ID or latched via the customers handset when called using the ***** prompt

To change the default setting of relay Two to 360 seconds from one second you would send the following SMS Message t the system

Message Sent *EXT2#00360

The visual screen will light up when this message has been received and if is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and the system will return a confirmation SMS Message as

Message received EXT2=00360 relay two will latch for 360 seconds when latched via the customer's handset when called using the **#** prompt

Temporary latching the relays

It is possible to temporary latch both relays independently without affecting the default settings for a period of from one second up to a maximum of 65535 and receive SMS Text alerts when the Relays have been activated and also when they have returned to normal status in the Off mode, subject to the administrators SMS alert being activated via the ***RERN#** command.

To Temporary latch relay one for say one hour 3600 seconds you would send the following SMS Message to the system.

Message sent *RLY1#03600

The visual screen will light up when this message has been received and if is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and the system will show a counter setting which will visually count down from the **03600 for Relay 1** and return a confirmation SMS Message as

Message received RLY1=03600 and relay one is active for one hour or 3600 seconds

When the relay has completed the 3600 second cycle you will received a confirmation SMS Message as.

Message received RELY1-OFF and relay one is back to normal status as **OFF**

To Temporary latch relay two for say one minute or 60 seconds you would send the following SMS Message to the system.

Message sent *RLY2#00060

The visual screen will light up when this message has been received and if is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and the system will show a counter setting which will visually count down from the **00060 for Relay 2** and return a confirmation SMS Message as

Message received RELAY2=00060 and relay one is active for one minute or 60 seconds

When the relay has completed the 60 second cycle you will received a confirmation SMS Message as.

Message received RELY2-OFF and relay two is back to normal status as **OFF**

Permanently Latching both Relays

It is possible also to permanently Latch both Relays either on or off independently without affecting the default settings of either relay

To permanently latch Relay one on you would send the following SMS Message to the system.

Message Sent *FRL1#1

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and will return a confirmation SMS Message as.

FRL1<ON> and Relay one is permanently latched on

To permanently latch Relay one back off you would send the following SMS Message to the system.

Message Sent *FRL1#0

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and will return a confirmation SMS Message as.

FRL1<OFF> and Relay one is permanently latched back off

The same format is used for Relay two using the ***FRL2#1** or ***FRL2#0** commands**.**

Setting the SMS Messaging Matrix

The three administrators can all receive SMS text alerts with the factory default set for administrator one only to receive these SMS text alerts.

These alerts can be toggled either on or off remotely to suit and is done simply with the ***RERN#** command as per the following

To set all three administrators to receive the SMS Text alerts you would send the following SMS Message to the system.

Message sent *RERN#111

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and will return a confirmation SMS Message as.

RERN<111> and al three administrators will receive SMS text alerts.

To toggle the SMS text alerts on or off you just use the format of ***RERN#** and use the **0** for off and the **1** for the on command

Therefore to toggle so only Admin 2 and 3 receive SMS text alerts the SMS Message sent would be as

***RERN#011** and the return message would be **RERN:<011>** and only admin 2 and 3 receive the SMS text alerts

To check the SMS messaging matrix setting you would send the following SMS Message to the system.

Message sent *RER?#

Setting the Alarm Inputs

The system has 2 alarm inputs that will send SMS text alerts, activating the output relay or sound the siren output when it triggered and these possible actions can be enabled or disabled independently.

The alarm inputs must be enabled in order to work. To enable the function of alarm input 1 you would send the following SMS message to the system.

Message sent *CTR1#1

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as

INCTR1=ON and Alarm Input one is enabled

To disable the function of alarm input 1 you would send the following SMS message to the system.

Message sent *CTR1#0

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as

INCTR1=OFF and Alarm Input one is disabled

The same format is used for Alarm Input two using the ***CTR2#1** or ***CTR2#0** commands**.**

To check the settings of both alarm input you would send the following SMS message to the system.

Message sent *CTR?#

Setting the Possible Actions for Alarm Input

The alarm inputs can be programmed to send SMS text alerts, activating the output relay or sound the siren output by enabling the possible actions when the alarm input has triggered.

To enable the possible actions for the alarm inputs you would send the following SMS message format to the system.

SMS Command Format:

***CTC1#A,M1,M2,S**

***CTC2#A,M1,M2,S**

Description:

A stands for the possible action (Selectable) **0 - 4**

M1 stands for enable (**1**) / disable (**0**) sending of SMS alert *STR[N]#

M2 stands for enable (**1**) / disable (**0**) sending of SMS alert *STO[N]#

S stands for enable (**1**) / disable (**0**) sounding of audible siren

Selectable Possible Action (A):

Action **0**:

- No Action

Action **1**:

- Activates Output Relay 1 to stay on

Action **2**:

- Activates Output Relay 2 to stay on

Action **3**:

- Turn Off Output Relay 1

Action **4**:

- Turn Off Output Relay 2

To program alarm input one to switch on output relay 1 and sends SMS text alerts only when triggered you would send the following SMS Message to the system.

Message Sent *CTC1#1,1,0,0

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as

CTC1=1,1,0,0 and the alarm input 1 has been programmed successfully

To program alarm input one to sends SMS text alerts and sound the siren output when triggered you would send the following SMS Message to the system.

Message Sent *CTC2#0,1,0,1

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as

CTC2=0,1,0,1 and the alarm input 2 has been programmed successfully

Input Alarm Message Settings

It is possible to change the Input Alarm display message for both Alarm Input one and Alarm Input two to suit the customer's application and the message content can be set up to 50 alphanumeric characters. Only letters and numbers are allowed, no special characters.

To change the display message for Alarm Input 1 to "**Door Opened!**" when the input 1 is triggered you would send the following SMS message to the system.

Message sent *STR1#Door Opened!

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as

STR1<Door Opened!> and the input 1 alarm message has been programmed successfully

To change the display message for Alarm Input 2 to "**Gate2 Opened!**" when the input 1 is triggered you would send the following SMS message to the system.

Message sent *STR2#Gate2 Opened!

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as

STR2<Gate2 Opened!> and the input 1 alarm message has been programmed successfully

Input Restoral Message Settings

It is possible to change the Input Restoral display message for both Alarm Input one and Alarm Input two to suit the customer's application and the message content can be set up to 50 alphanumeric characters. Only letters and numbers are allowed, no special characters.

To change the display message for Alarm Input 1 to "**Door Closed!**" when the input 1 is restored you would send the following SMS message to the system.

Message sent *STO1#Door Closed!

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as

STO1<Door Closed!> and the input 1 restoral message has been programmed successfully

To change the display message for Alarm Input 2 to "**Gate2 Closed!**" when the input 1 is restored you would send the following SMS message to the system.

Message sent *STO2#Gate2 Closed!

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as

STO2<Gate2 Closed!> and the input 1 restoral message has been programmed successfully

Input Trigger Delay Time Setting

The system will report the state of all inputs when any input changes state for longer than a programmable trigger time. The trigger time of each alarm input is programmable and can be varied from a minimum of 0.1 second to a maximum of 6553.5 seconds. Any change that does not remain stable for the specified trigger time will be ignored. The factory default trigger time is 1 seconds.

To change the default setting of input one trigger delay time to 10 seconds you would send the following SMS Message to the system

Message sent *DLY1#00100 and the command can be used up to a maximum of 65535 seconds with 5 digits from **00001** to **65535**

The visual screen will light up when this message has been received and if is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and the system will return a confirmation SMS Message as

Message received DLY1=00100 and input one will alarm when it has triggered for 10 seconds.

Power down Alarm

The system has a built in function that will both send a SMS text alert and sound a siren output in the event of a mains power failure at the gate and both these functions can be enabled or disabled independently.

To disable the Power down SMS text alerts for the power down function you would send the following SMS message to the system.

Message sent *ALAC#0

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as.

Message received ALAC-OFF and the power down SMS Messaging function has been disarmed

To enable this function again you would send the following SMS Messages to the system

Message Send *ALAC#1

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as.

Message received ALAC-ON the power down SMS messaging function has been re-armed.

Power down Siren Output

The system also has a Siren output which is activated also when the power supply is removed for more then 5 seconds and this function activates and sounds the connected siren.

The time period of the alarm can be programmed from 1 second up to a maximum of 18 hours or 65535 seconds and can also be armed or disarmed remotely

To set the alarm run time to say 900 seconds you would send the following SMS Messages to the system.

Message Sent *ALTM#00900

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as.

Message received *ALTM<00900 and the Siren will sound for 900 seconds every time the power is removed for more then 5 seconds

To disarm this function you would send the following SMS Message to the system.

Messages sent *ALNF#0

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as.

Message received ALNF-OFF and the Siren alarm function has been disabled

To enable the Siren Alarm Function you would send the following SMS Message to the system

Message sent *ALNF#1

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as.

Message received ALNF-ON and the Siren alarm function has been rearmed**.**

Check the Alarm Settings

It is possible to also check the settings of the alarm by sending the following SMS Message to the system.

Message sent *ALA?#

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as.

Message received

ALM1:ON/OFF
ALM2:ON/OFF
ALAC:ON/OFF
ALTM:<00600> or similar

Check the Signal Strength

It is possible to also check the actual signal strength of the system at its present location by sending the following SMS Message to the system.

Message sent *CSQ?#

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as.

Message received CSQ <22> or similar

The signal scale of registration can be from as low as < 2 > - < 3> up to a maximum of < 31 > and for optimum voice quality it is suggested you insure the signal strength at the location exceeds at least < 9 > or < 10 > and it is possible to use an extension antennae to improve the signal strength if required.

Check the System Status

It is possible to also check the system status by sending the following SMS Message to the system.

Message sent *TEST#

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will see the **< OK >** and will return a confirmation SMS Message as.

Message received TEST<OK> means the GSM network is ON and the system is working

Time Setting

To set the time, you can send the following SMS command to the unit. The time must enter in 24 Hour format.

SMS Command Format:

***TSET#SS,MM,HH;**

SS is a 2 digits value stand for seconds
MM is a 2 digits value stands for minutes
HH is a 2 digits value stand for hours

For example to set the time 8.00am, you would send ***TSET#00,00,08;** to the unit and the unit will return the following SMS text message **TSET=00,00,08;**

Learning Mode for Remote Controls

It is possible to add remote controls for the system to do so you must have additional identical remote control with you. To program them to the system, you would send the following text command to the unit

Messages sent *LERN#

The visual screen will light up when this message has been received and you may press any button on the remote control if it is programmed and you will see the **< OK >** and will return a confirmation SMS Message as.

Message received LEARN-OK and the remote control is programmed successfully

Otherwise **Message received LEARN-FAIL**

Changing the Password

It is possible to change the 6-digits password of the system. To do this you would send the following SMS message to the system

Message sent *PAWO#654321

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and will return a confirmation SMS Message as.

Message Received PAWO-OK and the system is now back in factory default and ready to reprogram.

Reset the System

Passwords are requires to access the system and for resetting the system back to factory default and this may be required if the user wants to relocate the user or has managed to freeze up the system or lost access to the control f the system.

Therefore as with most electronic systems the factory reset will re-formulate and program the system to factory default and you can start again.

To do this you would send the following SMS Message to the system

Message sent *REST#123456

The visual screen will light up when this message has been received and if it is in the correct format you will see a momentary indication that confirms it is correct and you will the **< OK >** and will return a confirmation SMS Message as.

Message Received REST-OK and the system is now back in factory default and ready to reprogram.

List of S.M.S Commands

SMS Command		Programming Function	Return Message
*TEL1#	<Phone Number 1>	Add Administrator 1	TEL1=< Phone Number >
*TEL2#	<Phone Number 2>	Add Administrator 2	TEL2=< Phone Number >
*TEL3#	<Phone Number 3>	Add Administrator 3	TEL3=< Phone Number >
*TEL?#	1	Admin Caller ID access ON	TEL-ON
*TEL?#	0	Admin Caller ID access OFF	TEL-OFF
*ANY?#	1	Guest list Caller ID access ON	ANY-ON
*ANY?#	0	Guest list Caller ID access OFF	ANY-OFF
*BOOK#	Guest Number	Add Guest List ID Number	BOOK<Phone Number>
DEL>#	Guest Number	Delete Guest List ID Number	Delete-OK
*DELB#		Delete All Guest List Numbers	Del-Book
*TETI#	20 - 59	Set call time in Seconds	TETI=<Value in Secs>
*RITI#	1 - 30	Set talk time in Minutes	RITI=<Value in Mins>
*SOUD#	0-6	Set Speaker Vol level from 1-6	SOUD <Value>
*MICO#	0-9	Set Microphone level from 1-9	MICO: <Value>
*EXT1#	<00000-65535>	Change default Relay one time	EXT1=<Value>
*EXT2#	<00000-65535>	Change default Relay two time	EXT2=<Value>
EXT1 and EXT2 Can be configured from 00001 <1 sec>up to <65535> 65,535 seconds			
*RLY1#	<00000-65535>	Temp Latch Relay one in Seconds	RLY1=<Value>
*RLY2#	<00000-65535>	Temp Latch Relay two in Seconds	RLY2=<Value>
RLY1 and RLY2 Can be configured from 00001 <1 sec>up to <65000> 65,535 seconds			
*FRL1#	1	Permanently Latch Relay one ON	FRL1-ON
*FRL1#	0	Permanently Latch Relay one OFF	FRL1-OFF
*FRL2#	1	Permanently Latch Relay two ON	FRL2-ON
*FRL2#	0	Permanently Latch Relay two OFF	FRL2-OFF
*RERN#	<000> <111>	Program Admin Messaging Matrix	RERN<Matrix>
The Matrix to program the 3 admin numbers is as the order of TEL1 TEL2 TEL3 < O is off and 1 is on >			
*CTR1#	1	Enable Alarm Input one	INCTR1-ON
*CTR1#	0	Disable Alarm Input one	INCTR1-OFF
*CTR2#	1	Enable Alarm Input two	INCTR2-ON
*CTR2#	0	Disable Alarm Input two	INCTR2-OFF
*CTR?#		Check the settings of both alarm inputs	INCTR1:ON CTC1:2 INCTR2:ON..
*CTC1#	A,M1,M2,S	Set the possible actions for alarm input 1	CTC1=1,1,0,0
*CTC2#	A,M1,M2,S	Set the possible actions for alarm input 2	CTC2=1,1,0,0

*STR1#	“Message Content”	Change the text for alarm input 1 trigger	STR1<message content>
*STR2#	“Message Content”	Change the text for alarm input 2 trigger	STR2<message content>
*STO1#	“Message Content”	Change the text for alarm input 1 restore	STO1<message content>
*STO2#	“Message Content”	Change the text for alarm input 2 restore	STO2<message content>
*DLY1#	<00000-65535>	Set the Input 1 trigger delay time	DLY1=<Value>
*DLY2#	<00000-65535>	Set the Input 2 trigger delay time	DLY2=<Value>
DLY1 and DLY2 Can be configured from 00001 <0.1 sec> up to <6553.5> 65,535 seconds			
*ALAC#	1	Turn Power down Text Alerts Off	ALAC-ON
*ALAC#	0	Turn Power down Text Alerts On	ALAC-OFF
*ALTM#	<00000-65535>	Set Alarm Siren Run time	ALTM:<Value>
ALTM Can be configured from 00001 <1 sec>up to <65535> 65,535 Factory default is 10 minutes < 600 secs >			
*ALNF#	1	Turn Siren Alarm Function On	ALNF-ON
*ALNF#	0	Turn Siren Alarm Function Off	ALNF-OFF
*ALA?#		Check the Alarm Settings	ALM1:ON ALM2:ON ALAC:ON…
*CSQ?#		Check the Signal Strength	CSQ<0> to CSQ<31>
*TEST#		Check the System Status	TEST<OK>
*TSET#	SS,MM,HH;	Time Setting	TSET=<Value>
*LERN#		Learning Mode for Remote Control	LEARN-OK / LEARN-FAIL
*PAWO#	123456	Change Password	PAWO-OK
*REST#	123456	Reset to Factory Default	REST-OK

Please be aware the factory reset *REST#123456 will erase the complete memory and you will need to program the system from the beginning again!

Hand Set Functions

These are the functions the person called from the Intercom can control via their handset using the following prompts whilst the telephone call is live

*	Will activate Relay one when these prompts are used when a call is live
#	Will activate Relay two when these prompts are used when a call is live

Specifications

- **Dual Band (900/1800Mhz) or Quad Band Module (850/900/1800/1900Mhz)**
- **Power Supply: 15 Volts DC 1 Amp supply**
- **Operating Temperature - 25 to 55°C**
- **Humidity Less than 95% RH**
- **Lightning Protector: 3-5W**
- **2 Output relays normally open 120VAC/24VDC 1 amp.**
- **Can call up to 3 numbers outbound.**
- **Battery back-up for up to 8 hours.**
- **Caller ID for up to 1000 users.**
- **Connections for manual operation of both output relays.**
- **Programmable via SMS or software.**
- **LCD for site programming and diagnostic status of system.**
- **Facility to switch off modem and retain hard wired Intercom if applicable.**
- **Comes in IP 65 enclosure with external flange mounting.**
- **C.E Approval**

Warranty Terms

Witura Corporation Sdn. Bhd. shall warrant all WT-9002 GSM Access Control Systems against defective parts and workmanship for 1 year. Witura Corporation Sdn. Bhd. shall, at its discretion, repair or replace the defective equipment upon the return of such equipment to any Witura branch. This warranty applies ONLY to defects in components and workman-ship and NOT to damage due to causes beyond the control of Witura, such as incorrect voltage, lightning damage, mechanical shock, water damage, fire damage, or damage arising out of abuse and improper application of the equipment.

Note: Wherever possible, return only the PCB to Witura Service Centres.
DO NOT return the enclosure.

The WT-9002 IP65 is a product of
Witura Corporation Sdn Bhd
And is
manufactured in Malaysia

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